AMENDMENTS TO THE CLAIMS

1-2. (Canceled)

3. (Currently Amended) A file-update apparatus which is able to mount a removable first recording medium, and execute a plurality of update procedures to update a file on the first recording medium, said file-update apparatus comprising:

a second recording medium;

a progress recording unit operable to record, onto said second recording medium, progress information showing which of the plurality of update procedures have been executed in updating the file;

a new-data recording unit operable to record, onto the first recording medium, data constituting a content of the file after updating the file, in a different storage location from data constituting a content of the file before updating the file;

an update information recording unit operable to record, onto said second recording medium, update information showing the storage location, on the first recording medium, of the data constituting the content of the file after updating the file;

an updating unit operable, after the update information has been recorded onto said second recording medium, and if no interruption of the update procedures has taken place, to update location information on the first recording medium based on the update information, so as to show the storage location of the data constituting the content of the file after updating the file;

a recovery unit operable, if an interruption of the update procedures has taken place,

and if a predetermined condition is satisfied, to determine which of the plurality of update procedures has been executed based on the progress information, and on a basis of the determination, to update the location information on the first recording medium so as to show the storage location of the data constituting one of the content of the file after updating the file or the content of the file before updating the file;

an ID recording unit operable, before the updating of the file on the first recording medium by said updating unit, to read unique medium identifier information from one specific position in the first recording medium, and to hold the medium identifier information within said file-update apparatus; and

a recovery suppressing unit operable, if the interruption of the update procedures has taken place and the predetermined condition is satisfied, and before said recovery unit updates the location information, to read medium identifier information from a same position as the specific position in a removable recording medium mounted in said file-update apparatus, compare the read medium identifier information with the held medium identifier information, and suppress the updating of the location information by said recovery unit if the read medium identifier information does not match the held medium identifier information,

wherein, if said recovery unit determines that less than a predetermined number of the update procedures has been executed, the location information on the first recording medium is returned to a pre-update state by said recovery unit, the pre-update state being a state of the location information before the execution of the update procedures began, and

wherein, if said recovery unit determines that more than the predetermined number of update procedures has been executed, the execution of the update procedures is resumed and

concluded, such that the location information on the first recording medium is recovered to a post-update state, the post-update state being a state of the location information after the conclusion of the update procedures.

4. (Previously Presented) The file-update apparatus of claim 3, wherein

the location information shows storage locations of data constituting contents of all files on the first recording medium,

said file-update apparatus targets a plurality of the files for updating,

said progress recording unit records progress information for each targeted file,

said new-data recording unit conducts, for each targeted file, the recording, onto the first recording medium, of data constituting a content of the file after updating,

said update information recording unit conducts the recording of update information, for each file that has undergone data recording by said new-data recording unit,

said updating unit conducts, for each file for which update information has been recorded, the updating of location information based on the update information of the file, and

said recovery unit, if an interruption of the update procedures has taken place, and if the predetermined condition is satisfied, conducts the updating of location information for each file, when judged, based on the progress information of the file, that update information relating to the file has been recorded.

5. (Previously Presented) The file-update apparatus of claim 4, further comprising:

a close instruction receiving unit operable to receive a close instruction relating to

individual files that have undergone data recording by said new-data recording unit, wherein

the progress information includes information for identifying whether a close instruction has been received,

said updating unit conducts, for each file, the updating of location information, only after update information relating to the file has been recorded and a close instruction relating to the file has been received, and

said recovery unit, if an interruption of the update procedures has taken place, and if the predetermined condition is satisfied, conducts the updating of location information for each file, only when judged, based on the progress information of the file, that update information relating to the file has been recorded and a close instruction-relating to the file has been received.

6. (Previously Presented) The file-update apparatus of claim 4, wherein

the first recording medium stores (i) FAT information showing, for each of a plurality of clusters on the first recording medium, whether data constituting any file content is stored in the cluster, and that clusters storing data constituting the content of the same file are linked, and (ii) directory information showing, for each file on the first recording medium, the first cluster storing data constituting the content of the file,

the location information is formed from the directory information and all FAT information except for unused-cluster information, the unused-cluster being FAT information showing clusters that do not store data constituting any file content,

the update information relating to each file that has undergone data recording by said

new-data recording unit is formed from (i) consecutive-relation information showing that clusters storing data constituting the content of the file after updating are linked, and (ii) entry information showing the first cluster storing data constituting the content of the file after updating the file,

said updating unit, for each file for which update information has been recorded, updates (i) the FAT information based on the consecutive-relation information of the file, so as to show that clusters storing data constituting the content of the file after updating are linked, and (ii) directory information relating to the file based on the entry information of the file, so as to show the first cluster storing data constituting the content of the file after updating the file, and

said recovery unit updates the location information by updating the FAT information based on the consecutive-relation information and the directory information based on the entry information.

7. (Previously Presented) The file-update apparatus of claim 6, further comprising:

an area-release unit operable, for each file for which update information has been recorded, to record, onto said second recording medium, free-space information showing that clusters which stored data constituting the content of the file before updating do not store data constituting any file content, wherein

said updating unit conducts the updating of the FAT information so that the free-space information is reflected in the unused-cluster information, and

said recovery unit conducts the updating of the FAT information so that the free-space

information is reflected in the unused-cluster information.

8. (Previously Presented) The file-update apparatus of claim 7, further comprising:

a FAT-information copying unit operable, before the updating of any of the files, to copy the FAT information on the first recording medium into a working FAT area on said second recording medium, as working FAT information; and

a close instruction receiving unit operable to receive a close instruction relating to individual files that have undergone data recording by said new-data recording unit, wherein

the progress information includes information for identifying whether a close instruction has been received,

said new-data recording unit records data constituting the content of the file after updating the file into clusters not storing data, based on (i) the working FAT information and (ii) the used-area information or the consecutive-relation information,

said update information recording unit makes the working FAT information reflect (i) the consecutive-relation information of each file for which a close instruction has been received, and (ii) free-space information that shows clusters which stored data constituting the content of the file before updating do not store data constituting any file content,

said updating unit updates the FAT information based on the working FAT information, and

said recovery unit, if an interruption of the update procedures has taken place, and if the predetermined condition is satisfied, (i) makes the working FAT information reflect, for each file, consecutive-relation information and free-space information that relate to the file,

when judged, based on the progress information of the file, that a close instruction relating to the file has been received, (ii) updates the FAT information based on the working FAT information, and (iii) updates the directory information based on the entry information of each file whose progress information shows that a close instruction has been received.

9. (Previously Presented) The file-update apparatus of claim 8, further comprising:

an update instruction receiving unit operable, at a time of recovery, to receive an update instruction indicating that if the first recording medium stores data constituting post-update file content, the location information is to be updated so as to show the storage location of the data, wherein

said recovery unit, if an interruption of the update procedures has taken place, and if the predetermined condition is satisfied and the update instruction has been received, makes the working FAT information, prior to use in updating the FAT information, reflect for each file, consecutive-relation information and free-space information that relate to the file, when judged, based on the progress information of the file, that update information relating to the file has been recorded.

10. (Previously Presented) The file-update apparatus of claim 3, wherein

the first recording medium includes an authentication area and a normal area that are mutually independent, a predetermined access restriction applying to only the authentication area of the two areas,

the location information is formed from (i) first location information showing storage

locations, within the authentication area, of data constituting contents of all files in the authentication area, and (ii) second location information showing storage locations, within the normal area, of data constituting contents of all files in the normal area,

the progress information is formed from (i) first progress information showing, for each file in the authentication area, which of the update procedures have been executed in updating the file, and (ii) second progress information showing, for each file in the normal area, which of the update procedures have been executed in updating the file,

said new-data recording unit (i) conducts, for each file in the authentication area targeted for updating, the recording, into the authentication area, of data constituting a content of the file after updating, and (ii) conducts, for each file in the normal area targeted for updating, the recording, into the normal area, of data constituting a content of the file after updating,

the update information is formed from (i) first update information showing, for each file in the authentication area that has undergone data recording by the new-data recording unit, the storage location, within the authentication area, of data constituting the post-update file content, and (ii) second update information showing, for each file in the normal area that has undergone data recording by the new-data recording unit, the storage location, within the normal area, of data constituting the post-update file content, and

said updating unit (i) conducts, for each file in the authentication area for which first update information has been recorded, the updating of first location information based on the first update information of the file, and (ii) conducts, for each file in the normal area for which second update information has been recorded, the updating of second location information based on the second update information of the file.

11. (Previously Presented) The file-update apparatus of claim 3, wherein

the first recording medium is a flash memory, and

said second recording medium is a memory that is accessible faster than the first recording medium.

12. (Previously Presented) The file-update apparatus of claim 11, wherein

said second recording medium is a RAM, and has power supplied by a power source that is independent from a power source of the first recording medium.

13-15. (Canceled)

16. (Currently Amended) A file-update method for executing a plurality of update procedures to update a file on a first recording medium, said file-update method comprising:

recording, onto a second recording medium, progress information showing which of the update procedures have been executed in updating the file;

recording, onto the first recording medium, data constituting a content of the file after updating the file, in a different storage location from data constituting a content of the file before updating the file;

recording, on the second recording medium, update information showing the storage location, on the first recording medium, of the data constituting the content of the file after updating the file;

updating, after the update information has been recorded onto the second recording medium, and if no interruption of the update procedures has taken place, location information on the first recording medium based on the update information, so as to show the storage location of the data constituting the content of the file after updating the file;

determining, if an interruption of the update procedures has taken place, and if a predetermined condition is satisfied, which of the plurality of update procedures has been executed based on the progress information, and on a basis of said determining, updating the location information on the first recording medium, so as to show the storage location of the data constituting one of the content of the file after updating the file or the content of the file before updating the file;

reading, before the updating of the file on the first recording medium, unique medium identifier information from one specific position in the first recording medium, and holding the medium identifier information within a file-update apparatus; and

reading, if the interruption of the update procedures has taken place and the predetermined condition is satisfied, and before the updating of the location information on the first recording medium, medium identifier information from a same position as the specific position in a recording medium of a processing target, comparing the read medium identifier information with the held medium identifier information, and suppressing the updating of the location information if the read medium identifier information does not match the held medium identifier information,

wherein, if it is determined in said determining that less than a predetermined number of the update procedures has been executed, the location information on the first recording

medium is returned to a pre-update state, the pre-update state being a state of the location information before the execution of the update procedures began, and

wherein, if it is determined in said determining that more than the predetermined number of update procedures has been executed, the execution of the update procedures is resumed and concluded, such that the location information on the recording medium is recovered to a post-update state, the post-update state being a state of the location information after the conclusion of the update procedures.

17. (Currently Amended) A computer program recording medium on which a program is recorded, the program being for causing a computer to execute a file-update method for executing a plurality of update procedures to update a file on a first recording medium, said file-update method comprising:

recording, onto a second recording medium, progress information showing which of the update procedures have been executed in updating the file;

recording, onto the first recording medium, data constituting a content of the file after updating the file, in a different storage location from data constituting a content of the file before updating the file;

recording, on the second recording medium, update information showing the storage location, on the first recording medium, of the data constituting the content of the file after updating the file;

updating, after the update information has been recorded onto the second recording medium, and if no interruption of the update procedures has taken place, location information

on the first recording medium based on the update information, so as to show the storage location of the data constituting the content of the file after updating the file;

determining, if an interruption of the update procedures has taken place, and if a predetermined condition is satisfied, which of the plurality of update procedures has been executed based on the progress information, and on a basis of said determining, updating the location information on the first recording medium, so as to show the storage location of the data constituting one of the content of the file after updating the file or the content of the file before updating the file;

reading, before the updating of the file on the first recording medium, unique medium identifier information from one specific position in the first recording medium, and holding the medium identifier information within a file-update apparatus; and

reading, if the interruption of the update procedures has taken place and the predetermined condition is satisfied, and before the updating of the location information on the first recording medium, medium identifier information from a same position as the specific position in a recording medium of a processing target, comparing the read medium identifier information with the held medium identifier information, and suppressing the updating of the location information if the read medium identifier information does not match the held medium identifier information,

wherein, if it is determined in said determining that less than a predetermined number of the update procedures has been executed, the location information on the first recording medium is returned to a pre-update state, the pre-update state being a state of the location information before the execution of the update procedures began, and

wherein, if it is determined in said determining that more than the predetermined number of update procedures has been executed, the execution of the update procedures is resumed and concluded, such that the location information on the recording medium is recovered to a post-update state, the post-update state being a state of the location information after the conclusion of the update procedures.